g.qui fit ex.a.in.b.z quia.c.z.f.sunt eq̃les.erit.g.ad vtrũqz eorum proportio vna z quia vt prius per.18.g.ad.f.sicut.a.ad.c.z ad.e.sicut.b.ad.e.erit.a.ad.c.sicut.b ad.d.quare permutatim.a.ad.b.sicut .c.ad.d. Non proponit autem eu lides de tribus numeris continue proportionalibus q ille qui ex ductu primi in tertium p/ducitur sit equalis quadrato medij.Et si ille qui ex primo in tertium producit̃ fue/rit equalis quadrato medij: q illi tres numeri sint continue proportionales sicut proponit in.16.sexti de tribus lineis .hoc eni facile demonstratur per hanc.20.me dio illorum trium numerorum equali assumpto:quẽadmodum in sexto de tribus lineis probatur per quatuor assumpta quatuor equali medio.

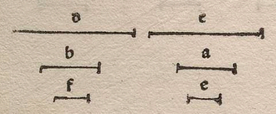
Propositio 21.

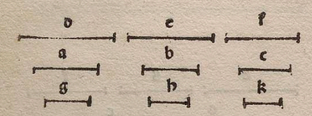
NUmeri secundus quãlibet proportionem minumi: nume/rant quoslibet in eadem proportione minor minorem et maior maiorem equaliter.

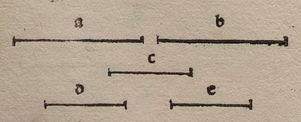
¶Sint. a.z . b. minimi numeri in sua proportione.sitqz. c.ad .d. sicut .a. ad. b.dico q .a.numerat.c.z.b.d. equaliter.Cum sit enim a.ad.b.sicut.c.ad. d. erit permutatim. a.ad.c. sicut. b .ad.d. erit igitur .a.c.to/ta pars vel partes quota vel quote .b .d. si itaqz fuerit pars constat propositum: At si partes sit .e.vna partium.a.z.f.vna partium.b.z quia tota pars est.e.c.per ypothe.quota.f.d.erit per diffinitionem proportio.e.ad.c.sicut. f.ad.d. quare p/mutatim.e.ad.f.sicut.c.ad.d.quare etiam sicut.a.ad.b.non sunt itaqz.a.z.b.mi/nimi sue proportionis:quod est contrarium positis. Similiter quoqz.

¶Quotlibet numeri sue in eadem proportione sue in diuersis mini mi numerant omnes in eadem proportione quisqz suum correlatiũ equaliter.

¶Vt si sint.a.b.c.minimi in eadem proportione vel in diuersis: sintqz in eadem vel cisdem.d.e.f.ita q sit.d.ad.e.vt.a.ad.b.z.c.ad.f.vt.b.ad.c.dico q.a. nume rat.d.z.b.e.z.c.f.equaliter:quia enim est.a.ad.b.vt.d.ad.e.erit permutati.a.ad d.vt.b:ad.e. et quia.b.ad.c.ut.e.ad.f.erit etiam permutatim.b.ad. e.ut.c. ad.f. quare.b.ad.e.z.c.ad.f.sicut.a.ad.d.z quia.a.b.c.sunt minores.d.e. f.erit. b.e.z c.f.tota pars aut partes.quota est.a.d.Si itaqz pars constat propositũ .At si par tes sit.g.vna partium.a.z.b.vna partium .b.z.k .vna.c.eritqz per presentẽ ypo/the.tota pars.b.e.z.k.f.quota.g.d.quare per diffinitionẽ.b.ad.e.z.k.ad. f.sicut g.ad.d.permutatim igitur erit.g.ad.b.vt.d.ad.e.z.b.ad.k.vt.e. ad. f.quare.g. ad.b.ut.a.ad.b.z.b.ad.k.vt.b.ad.c.quia ergo.g.b.k.sunt minores.a.b.c.z i ea dem proportione sequitur contrarium positi.







Propositio .22

SI fuerint duo numeri scõm suam proportionem minimi: ipsi erunt adinuicem primi.

¶Sint duo numeri.a.z.b.scõm suaz proportionem minimi. dico q ipsi sunt contra se primi. Si enim nõ numeret eos.c.ẽm.d.z.e.erit q̃ per.18. d.ad.e.sicut.a.ad.b.z quia.d.z.e.sũt minores .a.z.b.se/quitur.a.z.b.non esse sue proportionis minimos:qõ ẽ ꝓriũ positioni. Silr quoqz

¶Si fuerint quotlibet numeri in continuatione suarum ꝓportionum

sue eadẽ sue diuerse fuerint mimi.nullus numerus numerabit oñs.

¶Vt si sint.a.b.c.minimi in ꝓtinuatione suaz proportionũ:dico q nullus nume rabit omnes.Sin autem numeret eos.d.a.quidẽ.ẽm. e.b .vero ẽm. f.z.c. ẽm.g. eritqz p.18..c.ad.f.sicut.a.ad.b.z.f.ad.g.sicut.b.ad.c.qz ergo.c.f.g.sũt minores a.b.c.z ẽm ꝓportione eorum nõ erunt.a.b.c.quales positi sunt: quod ẽ inconue/niens.¶Quãq̃ autẽ nullus numeret.a.b.c.si fuerint minimi:potest tamẽ esse ut quoslibet duos ex eis numeret vnus :ductoetenim quolibet numero in aliquez ad se primũ ac vtroqz coz in aliquẽ tertiũ ad vtrunqz primũ:prouenient tres numeri quoz quilqz duo erunt cõpositi. Nullꝰ tamẽ numerabit oñs.Sint eni.a.b.c.tres numeri quoz quilqz sit primus ad alios:ducatq̃z.a.in.b. z.c.z proueniat. d.z.c. itemqz.b.in.c.z ꝓueniat.f.dico quoslqz duos ex.d.e.f.esse adinuicem compositos tamẽ nullus numerabit omnes duos quoslqz pz esse cõpositos.a.enim numerat.d z.c.b.vero.d.z.f.z.c.z.f.Qõ autẽ nullus numeret oẽs:patebit prius demõstra to q.a .est maximus numerans.d.z.c.b.quoqz maximꝰ numerãs.d.z.f.z.c.ma/ximus numerãs.c.z.f.hoc aũt sic cõstat:si eni.a.nõ ẽ maximꝰ numerãs.d.z.e .sit itaqz.g.numeretqz.d.ẽm.b.z.c.ẽm.k.eritqz p scõam ptẽ.20.a.ad.g.sicut.b.ad.b itemqz p eãdẽ.a.ad.g.sicut.k.ad.c.qz ergo.a.est minor.g.erit.b.minor.b.z.k.mi nor.c.z qz.b.ad.k.sicut.b.ad.c.vtraqz eni ẽ sicut.d.ad.e.p .18.bis assumptã.sunt autẽ:b.z.k.minores.b.z.c.erit p imediate sequẽtẽ z per hãc ypoth. q. b.z.c.sint ꝓtra se primi reperire minimis minores:qõ qz ẽ impossibile: erit.a.maximꝰ nume rãs.d.z.c.Eodẽqz mõ ꝓbabit̃ q.b.sit maximus numerãs.d.z.f.z. c.maximꝰ nu/merãs.e.z.f.siquis ergo numerat.d.e.f.p corel. scõe ter assũptũ ipse numerabit a.b.c.sed quilqz eorũ primus erat ad reliquos.Accidit igit̃ impossibile, Silr quoqz

¶Quotlibet numeri quos vnus nõ numerat scõm cõtinuationẽ suaz ꝓportionũ sunt minimi. ¶Vt si sint.a.b.c.quilibet numeri quos oẽs nul/lus numerat.dico q ipsi sunt in continuatione suaz ꝓportionũ minimi. Alioquin sint minimi.d.e.f.qui p.21.numerabunt.a.b.c.quilqz suũ relatiuum equaliter .sit ergo vt scõm.g.eritqz per.17.vt viceuersa.g.numeret.a.b.c.scõm.d.e.f. quare ac/cidit ꝓrium positioni. Propositio .23.

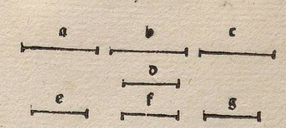
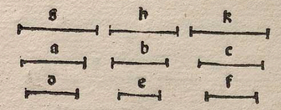
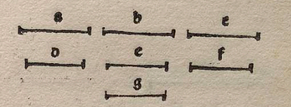
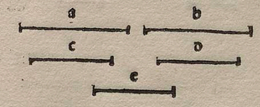
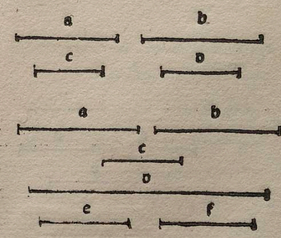
QUilibet numeri ꝓtra se primi sũt ẽm suã ꝓportõem mimi.

¶Hec ẽ cõuersa ꝓmisse vt si duo numeri sint.a.z.b. ꝓtra se ꝑmi :ipsi erũt ẽm suã ꝓportionẽ minimi:sin aũt sint minimi i eadẽ ꝓportiõe si possibile ẽ.c.z.d.cõstat itaqz p.21.q.c .numerat.a.z.d.b. eq̃liter sit igitur vt scõm.e.erit per.17.vt viceuersa.e.numerat.a.z.b.a.qui dem secddũ.c.z.b.scõm.d.non sunt igit̃.a.z.b.ꝰ se ꝑmi qõ ẽ ꝰ ypoth.

Propositio .24.

SI fuerint duo numeri cõtra se primi.si quis vnũ eoz nu/meret ad alterũ eẽ primus necessario comprobatur.

¶Sit.a.z.b.ꝰ se ꝑmi.c.vero numeret.a.dico q.c.ꝑmꝰ ẽ ad.b.alio/qui nũeret eos.d.q̃ p penul. ꝓcept.nũerabit etiã.a. nõ sũt ẽ.a.z.b. ꝰ se ꝑmi.d.eni numerat ãbos. Propositio .25.

SI fuerint duo numeri ad aliũ quẽlibet primi qui ex ductu vnius in alterũ ꝓducetur.ad eundem erit primus.

¶Sit vteraz duoz numeroz.a.z.b.primus ad.c.z ex.a.in. b. sit.d dico q.d.est primus ad.c.aliter eni numeraret eos.e. d.q̃dã ẽm.f.